Palsonic

DIGITAL VIDEO DISC PLAYER
MODEL: DVD - 2000

Type Tested
Electrical
Safety
AS/NZS 3250 Lic 4168
Standards Australia
APP No: CS7554N

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DVD/VIDEO   CD/AUDIO   CD PLAYER

Dear Customers

May we take this opportunity to thank you for purchasing this DVD/VIDEO CD/CD player. We strongly recommend that you carefully study the Operating instructions before attempting to operate the unit and that you note the listed precautions.

Safety information

l **Note:**

This unit can be used only where the power supply is AC 110-240V, 50/60 Hz. It cannot be used elsewhere

l **CAUTION:**

◎ DVD/VIDEO CD/CD PLAYER IS A CLASS 1 LASER PRODUCT. HOWEVER THIS DVDNIDEO CD/CD PLAYER USES A VISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THE DVD/VIDEO CD/CD PLAYER CORRECTLY AS INSTRUCTED.

◎ WHEN THIS DVD/VIDEO CD/PLAYER IS PLUGGED TO THE WALL OUTLET, DO NOT PLACE YOUR EYES CLOSE TO THE OPENINGS TO LOOK INTO THE INSIDE OF THIS PLAYER.

◎ USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

◎ DO NOT OPEN COVERS AND DO NOT REPAIR BY YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

l **WARNING:**

◎ TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

◎ TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, AND'ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

l **THIS DEVICE IS INTENDED FOR CONTINUOUS OPERATION !**

Precautions

Please read these precautions before operating this unit.

l **Power cord protection**

To avoid any malfunctions of the units, and to protect against electric shock, fire or personal injury, please observe the following.

◎ **Do not connect or disconnect the AC power cord when your hands are wet.**

◎ **Keep the AC power cord away from heating appliances.**

◎ **Never put any heavy object on the AC power cord.**

◎ **Do not attempt to repair or reconstruct the AC power cord in any way.**

l **Placement**

Avoid placing the unit in areas   of:

◎ direct sunlight or heating radiators, or closed automobiles

◎ high temperature (over 35^0 C or high humidity (over 90%)

◎ excessive dust

◎ vibration impact or where the surface is tilted; As the internal parts may be seriously damaged.

l **Non-use Periods**

◎ When the unit is not being used, turn the unit off.

◎ When left unused for a long period of time, the unit should be unplugged from the household AC outlet.

l **No fingers or other objects inside**

◎ Touching internal parts of this unit is dangerous, and may cause serious damage to the unit. Do not attempt to disassemble the unit.

◎ Do not put any foreign object on the disc tray.

l **Keep away from water and magnets.**

◎ Keep the unit away from flower vases, tubs, sinks, etc. If liquids are spilled into the unit, serious damage could occur.

◎ Never bring magnetic objects such as speakers near to this unit.

l **Stacking**

◎ Place the unit in a horizontal position, and do not place anything heavy on it.

◎ Do not place the unit on amplifiers or other equipment which may become hot.

l **Condensation**

Moisture may form on the lens in the following conditions.

◎ immediately after a heater has been turned on.

◎ in a steamy or very humid room.

◎ when the unit is moved from a cold environment to a warm one.

If moisture forms inside this unit, it may not operate properly. In this case, turn on the power and wait about one hour for the moisture to evaporate.

l **If there is noise interference on the TV while a broadcast is being received**

Depending on the reception condition of the TV, interference may appear on the TV screen while you are watching a TV broadcast and the unit is left on. This is not a malfunction of the unit or the TV. To watch a TV broadcast, turn off the unit.

Features

l **DVD: a completely new dimension in video entertainment**
◎ Subtitles may be displayed in one of a maximum of 32 languages.
◎ The audio soundtrack can be heard in up to 8 languages.
◎ The multi-angle function allows you to choose the viewing angle of scenes which were shot from a number of different angles.(Limited to DVD recorded with multiple camera angles.)
The number of the languages recorded is dependent on the software.

l **Various Karaolte functions**
◎ When using a DVD Karaoke disc (5ch) which includes two master vocals (e.g. male and female parts) recorded on a different channel, selecting either channel makes it possible to practice a duet song by yourself. (Virtual duet)
◎ When using a DVD Karaoke disc (5ch) which includes a guide melody for vocal recorded separately on a channel, enjoying Karaoke only with an accompaniment is possible by turning off the guide melody.

l **High quality digital audio**
◎ The Dolby Digital (AC-3)/Linear PCM decoder is built into the player which makes it possible to enjoy Multi-Channel Surround sound.
◎ With linear PCM sound of a 48 kHz/16 bit through 96 kHz/24 bit , audio quality exceeding that of CDs becomes possible.

l **Many convenient features**
◎ GUI (Graphical User Interface) screens for showing the disc information or player information and providing access to many major functions of this unit.
◎ Programming of up to 5 scenes in memory (marker).
◎ Parental lock setting to prevent play of discs unsuitable for some audiences. [only DVD]

l **Compatible with PAL DVD (Video CD) and NTSC DVD (Video CD)**
◎ This player can play discs recorded in either PAL or NTSC format.
However, the player must be connect to a Multi system TV to play both PAL DVD (Video CD) and NTSC DVD (Video CD). The use of a Multi-system TV is recommended.

l **Compatible with Video CD and CD as well as DVD.**

Disc formats supported by this player

The unit can play back discs bearing any of the following marks:

DVD
(8 cm disc/l 2 cm disc)

VCD
(8 cm disc/l2 cm disc)

CD
(8 cm disc/l 2 cm disc)

Accessories

(accessories are listed on the accessories bill)

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Getting Started

Basic Operations

Enjoying Karaoke

Operation Using GUI Screen

Advance Operation

Initial Settings

For Your Reference

Control reference guide

Main Unit

(1) POWER
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

(2) MIC LEVEL controls (1, 2)

(3) ECHO control

(4) Remote control signal sensor

(5) Display Window

(6) ANGLE indicator

(7) STANDBY indicator
When the unit is connected to the AC mains supply, the indicator lights up in standby mode and goes out when the unit is turn on.

Remote Control Unit

(1) POWER button
(2) PLAY MODE button
(3) MARKER button
(4) Numeric buttons
(5) SKIP buttons (|◀◀, ▶▶|)
(6) STOP button (n)
(7) STILL/PAUSE button (▶|◀)
(8) DISPLAY button
(9) Joystick button (◀ , ▶ , ▲ , ▼)
(10) TITLE button
(11) MENU button
(12) KARAOKE MODE button
(13) GUIDE MELODY button
(14) ONE TOUCH button
(15) OPEN/CLOSE button
(16) CLEAR button
(17) SETUP button
(18) REPEAT MODE button
(19) A-B REPEAT button
(20) SUBTITLE button
(21) AUDIO button
(22) ANGLE button
(23) SLOW/SEARCH buttons (◀◀ ,▶▶)
(24) PLAY button (▶)
(25) SELECT button
(26) RETURN button
(27) KARAOKE DISP. button
(28) KEY CONTROL buttons
(29) VOICE button
(30) REQUEST button

(8) OPEN/CLOSE button

(9) SKIP buttons

(10) PLAY button

(11) Shuttle dial (SEARCH)

(12) KEY CONTROL button

(13) STILL/PAUSE button

(14) STOP button

(15) Numeric buttons
l **To select a 2-digit number**
Example: To select track 23
Press ">10", "2" and then "3"

(16) Disc tray

(17) MIC jacks (1,2)

5
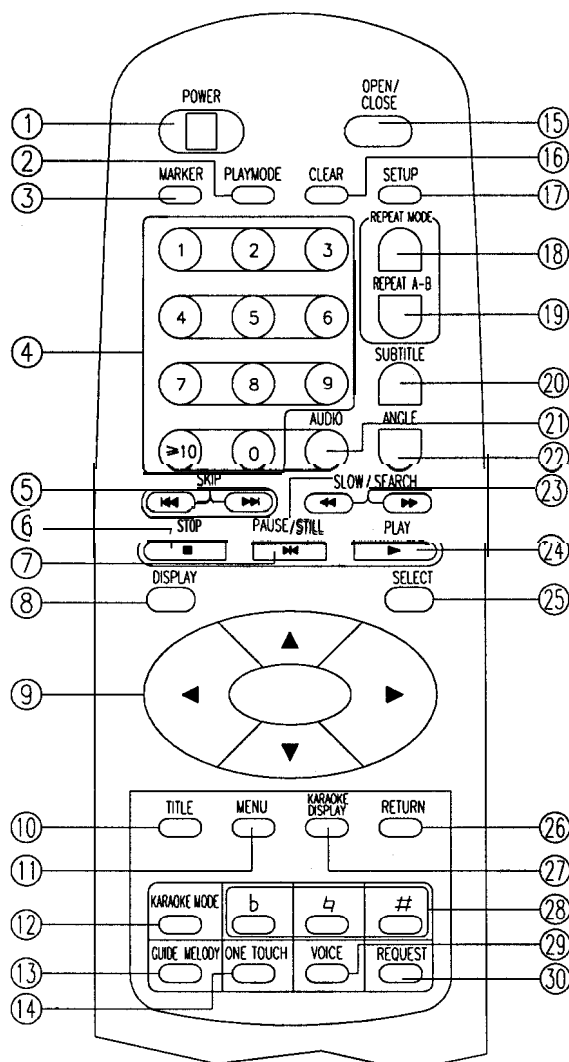
Basic connection

l Ensure that the power switch of this unit and other
   equipment to be connected is set to off before
   commencing connection.
l Do not block ventilation holes of any of the equipments
   and arrange them so that air can circulate freely.
l Read through the instructions before connecting
   other equipment.
l Ensure that you observe the color coding when
   connecting audio and video cords.

Connecting to a Stereo TV set [A]

 (1) TV set (optional)
 (2) DVD/VIDEO CD/CD player
 (3) Video/audio cord (supplied)
 (4) S-video cord (supplied)
 (5) To audio input connectors (red, white)
 (6) To video input connectors (yellow)
 (7) To S-video input connector
 (8) AC power cord
 (9) To power outlet (AC 110-240V, 50/60 Hz)
 (10) Power switch
 (11) Signal ground terminal
      Connect the signal ground terminal to ground to
      reduce noise from microphone cable during
      Karaoke. (This is not a safety earth.)

S-video output connector
The S (separate) video output connector separates the
color (C) and luminance (Y) signals before transmitting
them to the TV set in order to achieve a sharper picture.
Use the S-video cord (supplied) when connecting the
player to a TV set equipped with an S-video input
connector for the best picture clarity possible.

Connecting to a Monoaural TV set [B]

 (1) TV set (optional)
 (2) DVD/VIDEO CD/CD player
 (3) Audio cord (optional)
 (4) Video/audio cord (supplied)
 (5) To audio input connectors (red, white)
 (6) To video input connectors (yellow)

Connecting to an audio equipment [C]

 (1) Audio equipment (optional)
 (2) TV set (optional)
 (3) DVD/Video CD/CD player
 (4) Audio cord (optional)
 (5) To audio input connectors (red, white)
 (6) Video/audio cord (supplied)
    S-video cord (supplied) (See above [A])

Notes:
l During DVD play, the TV volume may be at a lower
   level than during TV broadcasts, etc. If this is the case,
   adjust the volume to the desired level.
l **If the DVD/Video CD/CD player is connected to the
   TV through a video cassette recorder, the picture may**
   not be played back normally with some DVDs If this
   is the case, do not connect the player via the VCR.
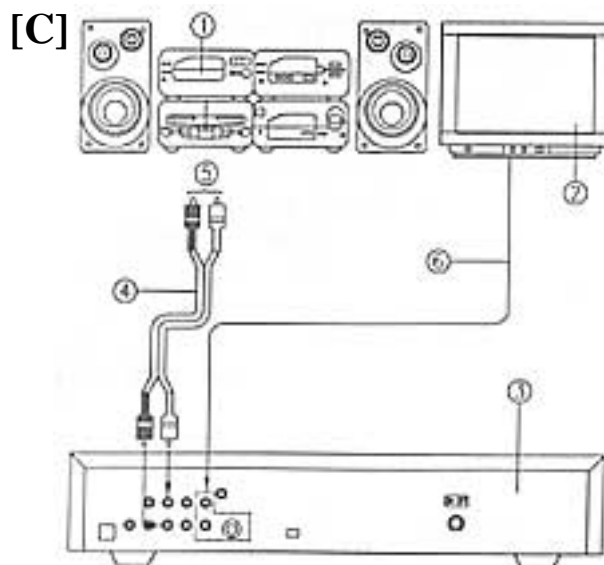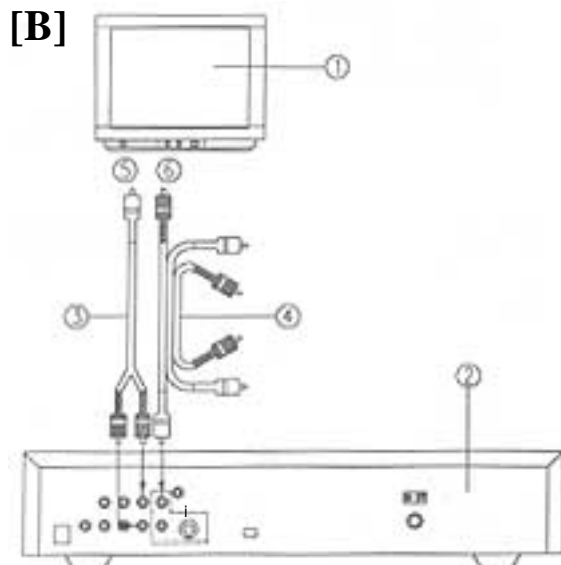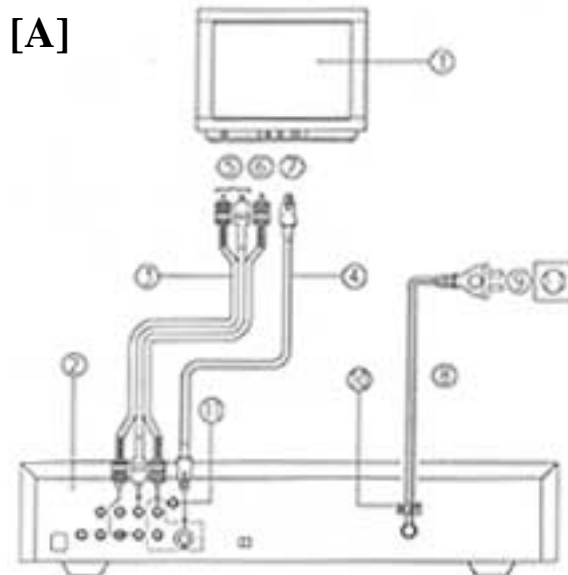
Optional audio connections

The player contains a Dolby Digital (AC-3) decoder. This enables the playback of DVDs recorded in Dolby Digital, Linear PCM without the need for an external decoder with Dolby Digital, Linear PCM processing. When the player is connected to an AV amplifier with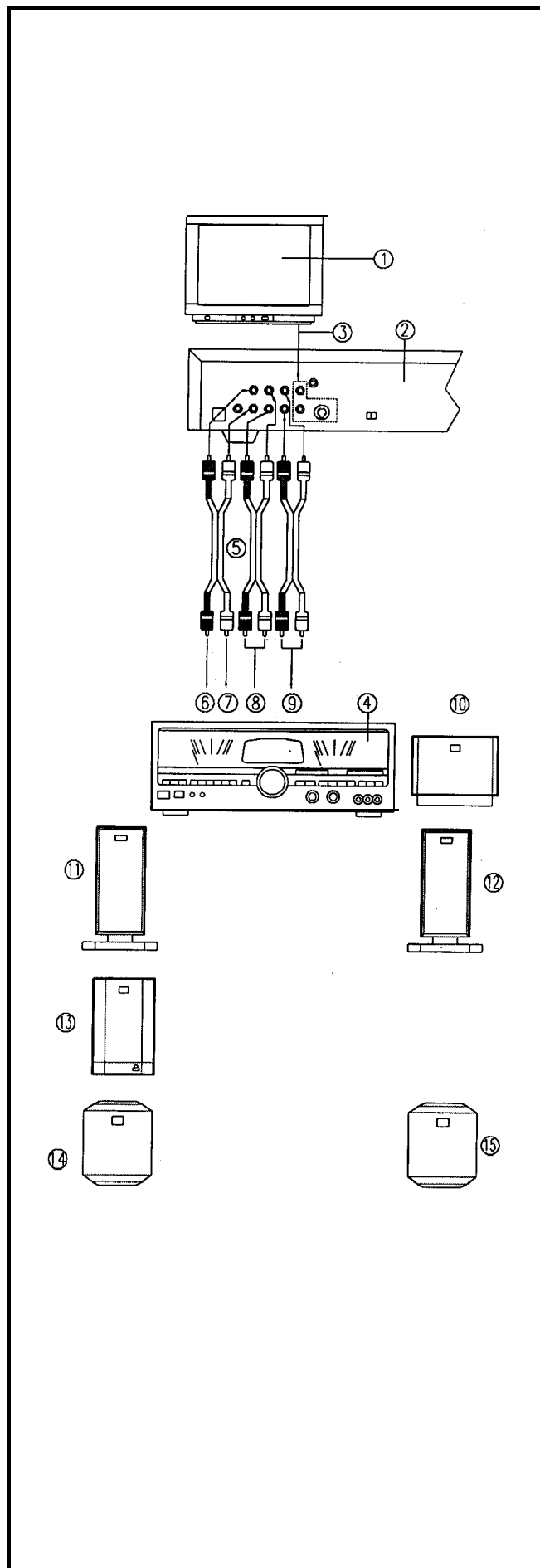 5.1ch input connectors, you can enjoy theater-quality audio in your home when playing discs recorded in Digital, Linear PCM.

(1) TV set (optional)

(2) DVDNIDEO CD/CD player

(3) Video/audio cord (supplied)

   S-video cord (supplied)

   (see page6 [A])

(4) AV Amplifier with 5.1 ch input connector

(5) Audio cords (optional)

(6) To audio input connector (CENTER)

(7) To audio input connector (SUBWOOFER)

(8) To audio input connector (SURROUND L , R)

(9) To audio input connector (FRONT L , R)

(10) Center speaker

(11) Front speaker (Left)

(12) Front speaker (right)

(13) Subwoofer (left)

(14) Surround speaker

(15) Surround speaker (right)

   (All sold separately.)

Notes:
l After connection is made, set the "Speaker setting" (such as Yes/No and Large/Small) according to your speaker system.. (see page 23).
l If the surround speakers or center speaker can't be installed at an equal distance to (or further away from) the front speakers from the listening position, then change the delay time setting at "Speaker setting" on page 23, to compensate.
l If the type of the speakers connected does not satisfy the channels recorded in a Linear PCM disc, the disc will not be played in all the channels but only in 2 channels. (For example, even if the front speakers and the center speaker are connected, a disc recorded in 5 channels will be played back only in 2 channels.)
l DVDS recorded in Linear PCM/96 kHz sampling in which "Center Speaker" is contained will also be played back only in 2ch.
l No surround sound will be delivered during playback of DVD Karaoke.
l When the microphone is connected or the Karaoke functions such as Key control, Voice changer and One touch Karaoke are activated for the DVDs which are not designed for Karaoke, sound will be delivered only through the front speakers (L/R). (See pages 11-12.)
When using speakers other than the front speaker (L/R), disconnect the microphone and stop using the Karaoke function. If still no sound will be delivered, press OPEN/CLOSE twice.

Optional audio connection

Connecting to a decoder with Dolby Digital (AC-3) processing [A]

When DVDs recorded in Dolby Digital are played, Dolby Digital bitstream is output from the player's OPTICAL digital audio output connector or COAXIAL digital audio output connector. When the player is connected to a Dolby Digital decoder, you can enjoy theater-quality audio in your home. [An optical digital cable or coaxial audio cable (both optional) is required when an optional Dolby Digital decoder is used.]

(1) TV set (optional)
(2) DVDNIDEO CD/CD player
(3) Video/audio cord (supplied)
    S-video cord (supplied)
(4) Decoder or **Amplifier** with Dolby Digital (AC-3) processing (optional)
(5) Coaxial audio cable/Optical digital cable (optional)
(6) To coaxial digital audio input connector/To optical digital audio input connector

Notes when connecting the optical digital cable (optional)
l Remove the dust protection cap from the connector and connect the cable firmly so that the configurations of both the cable and the connector match ([B])
l Keep the dust protection cap and always reattach the cap when not using the connector to protect against dust.

Concerning the audio output from the unit's optical/coaxial digital audio output connector

Disc	Sound recording format	Optical/coaxial digital audio output from connector
DVD	Dolby Digital (AC-3)	Dolby Digital bitstream (2-5.lch) or PCM (2ch) (48 kHz/16 bit)*[1]
	Linear PCM (48/96kHz 16/20/24 bit)	Linear PCM (2ch) (48 kHz sampling/16 bit only)*[2] or no output*[1]
VCD	MPEG 1	PCM (44.1 kHz sampling)
CD	Linear PCM	Linear PCM (44.1 kHz sampling)

*[1] The type of audio output from the connector can be selected by the initial settings. (See page 22.)
*[2] Sound having 96 kHz sampling is converted into 48kHz sampling when it is output from the unit's optical/coaxial digital audio output connector. '

For your reference:
l Dolby Digital (AC-3) is a digital sound compression technique developed by the Dolby Laboratories Licensing Corporation. Supporting 5.1-channel surround sound, as well as stereo (2-channel) sound, this technique enables a large quantity of sound data to be efficiently recorded on a disc
l Linear PCM is a signal recording format used in CDs. While CDs are recorded in 44.1 kHz/16 bit, DVDs are recorded in 48 kHz/16 bit up to 96 kHz/24 bit
l If you have a Dolby Pro Logic Surround decoder, you will obtain the benefit of Pro Logic from the same DVD movies that provide full 5. l-channel Dolby Digital soundtracks, as well as from titles with the Dolby Surround mark.

Caution for the optical/coxial digital audio output connector:
l Do not connect an amplifier (with an optical/coxial digital input connector) which does not contail Dolby Digital (AC-3).
l Otherwise ant attempt to play DVDs may cause such a high level of noise that it may be hamful to yourears and damage your spaekers.
l Video CDs and CD's can be played as they would normally be may be played.

[A]
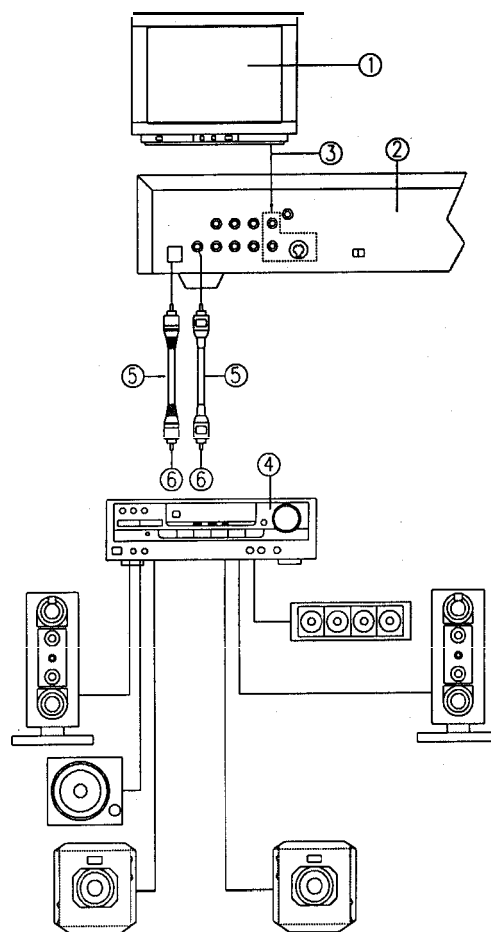
[B]
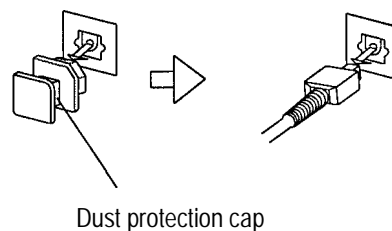
Dust protection cap

Basic play

Preparations
l **Remote control preparation**
 Insert the batteries while observing the correct(+) and
 (-) polarities
Notes:
 (1) The batteries normally last for about one year
   although this depends on how often and for what
   operations the remote control is used.
 (2) If the remote control unit fails to work even when
   it is operated near the player, replace the batteries.
 (3) Use size 7 batteries.
 (4) Remote control operation range: point the remote
   control unit no more than about 7 m from the
   remote control sensor and within about 60 of the
   front of the unit.(the operating distance may vary
   according to the brightness of the room.)
 l Switch the TV ON and select "Video" as the TV input.
 l Switch on the stereo system's power if the player has
   been connected to stereo system.

Basic play

1 Turn on the power switch on the rear panel.

2 press POWER to switch on the power.

3 Press OPEN/CLOSE to open the disc tray.

4 Place a disc onto the disc tray.

 Hold the disc without touching either of its surfaces,
 position it with the printed title side facing up, align it
 with the guides, and place it in its proper position.

5 Press PLAY.
 The disc tray is automatically closed and play begins.
 l When the disc tray is closed by pressing OPEN/CLOSE,
   press PLAY to commence play.

 l **When a menu screen appears on the TV monitor**
   In case of interactive DVD or Video CD withs
   playback control, a menu screen appears on the TV
   monitor. Perform step 5 to commence play.

**6 Tilt the joystick to the ◀ / ▶ / ▲ / ▼ direction
   and**
   **press SELECT, or press the numeric button(s),
   to select the preferred item.**
 l The joystick is not effective for selecting items for
   Video CDs.
 Play of the selected item now begins.

When the menu continues onto another screen
After step 4, press SKIP ▶▶| (SKIP buttons may not be
effective depending on the disc.)
 l TO return to the previous menu screen
   Press |◀◀ SKIP.
 l For operation, refer also to the jacket of the disc concerned.

Basic play

Stopping play and returning to the menu screen
 l **DVD**
  Press TITLE, MENU or RETURN.
  (Which button is pressed differs depending on the disc used.)
 l **Video CD**
   Press RETURN.

 l Play is suspended, and the menu screen is displayed.

After operation
 When the unit is not in use, remove the disc and press
 POWER to turn off the unit.
 The power will automatically turn off after 30 minutes or so
 have elapsed in the stop mode. (**Auto power-off function)**

Notes
 l The disc continues to rotate while the menu is displayed
   even after the player has finished playing a particular item.
   When no further selections are to be played, be sure to
   press the STOP button to clear the menu display.
 l If the disc is placed in upside down (and it is a single
   sided disc), the DVD display will indicate "NO DISC".

For your reference:
 l When Ⓝ appears while a button is being operated, it
   means that the corresponding operation is prohibited by
   the player or the disc.

Stopping play

Press STOP.

For your convenience:
 l When play is stopped, the unit records the point where
   STOP was pressed (RESUME function). ("▶" flashes
   on the unit's display when this function is activated.)
   Press PLAY again and play will resume from this
   point.When the tray is opened or STOP is pressed
   again the RESUME function will be cleared.
   The RESUME function works only with discs for
   which the elapsed playing time appears on the unit's
   display during playback.
   This feature will not be cleared when the power is
   turned OFF and then ON.

Skipping ahead or back

Skipping ahead

Press SKIP ▶▶| during play
A chapter (DVD) or a track (Video CD/CD) is skipped
each time the button is pressed.

Skipping back

Press |◀◀ SKIP during play
When the button is pressed once midway through a
chapter/track, play returns to the' start of that
chapter/track. When it is pressed again, a chapter/track
is skipped each time the button is pressed.

For your reference:
 l When |◀◀ SKIP ▶▶| is pressed during menu play of
   Video CDs, a menu screen may sometimes be recalled.

Rapid advance (Rapid reverse)

By the remote control unit
**Press SLOW/SEARCH ◀◀ (Reverse direction) or
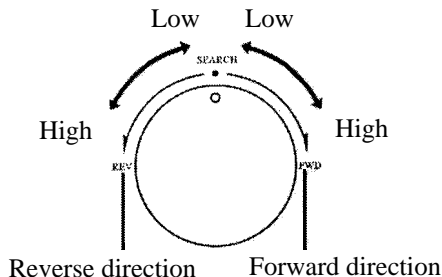▶▶ (Forward direction) during play.**

l The speed of advance (reverse) is relatively slow at first.
When the button is pressed again, the speed becomes
faster. (Each time the button is pressed, the speed
increases up to 5 steps.)

To return to normal play
Press PLAY.

On the main unit
Turn the shuttle dial during play.

Low   Low

High   High

Reverse direction   Forward direction

l The speed increases up to 5 steps.
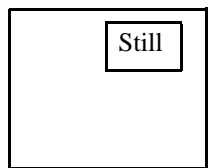l Norma1 play is resumed when the shuttle dial is
released.

For your reference:
l When SLOW/SEARCH or the shuttle dial is used
during menu play of Video CDs, a menu screen may
sometimes be recalled.

Still picture (Pause)

Press STILL/PAUSE during play

l **DVD/Video CD:**
The player will be placed in the
still picture mode

l **CD:**
The player will be placed in the
pause mode.

Still

(DVD/Video CD)

To return to normal play
Press PLAY.

Frame advance [DVD/VIDEO CD]

Press STILL/PAUSE in the still picture mode.
The disc is advanced by one frame each time the button
is pressed.
l When the button is kept pressed, consecutive frame
advance works.

To return to normal play
Press PLAY.

Slow-motion play [DVD/Video CD]

By the remote control unit
**Press SLOW/SEARCH ◀◀ (Reverse direction) or
▶▶ (Forward direction)**

l The speed of slow-motion is relatively slow at first.
When the button is pressed again, the speed becomes
faster. (Each time the button is pressed, the speed
increases up to 5 steps.)

To return to normal play
Press PLAY.

On the main unit
Turn the shuttle dial in the still picture mode.

Low Low

High   High

Reverse direction   Forward direction
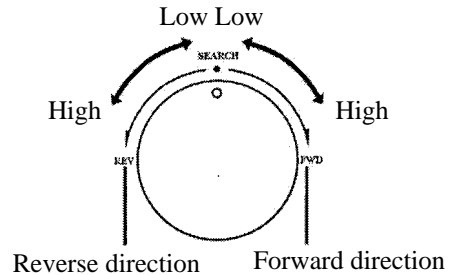
l The speed increases up to 5 steps.
l Still picture mode is resumed when the shuttle dial is
released.

For your reference:
l For Video CDs, slow-motion playback in reverse
direction is not possible.

Enjoying Video CDs with playback control without using meuns [Video CD Only]

1. Press STOP after the menu screen appears (after step
5 on page 9).
("PBC" will be cleared from the unit's display.)
2. Press the numeric button(s) to select the preferred track.
(Play begins.)
l Refer to the jacket etc. of the disc concerned for the
track numbers.
l Press "1" to start play from the beginning of the disc.

To return to menu play
Press STOP to stop playback and press MENU.
("PBC" will light up on the unit's display and the menu
is resumed.)
Perform step 6 on page 9.

Enjoying Karaoke

Preparations:
l   It is recommended to connect the audio equipment when enjoying Karaoke. (See page 6.)

Example of DVD Karaoke disc (5ch):
lch: Stereo accompaniment (left)
2ch: Stereo accompaniment (right)
3ch: Guide melody
4ch: Master vocal (male part)
5ch: Master vocal (female part)
l   The contents may differ depending on the disc,

Notes:
l   NO sound will be delivered from the center or surround speakers or subwoofer during playback of DVD Karaoke.
l   NO sound will be delivered from the center or surround speakers or subwoofer when the microphone is connected or the Karaoke function (Key Control/Voice Changer/ One Touch Karaoke) are activated for the DVDs which are not designed for Karaoke.

Basic Karaoke play

1 Connect the microphone(s) (optional) to the MIC jack(s).
l   Microphones with 6.3 mm plug can be connected.

2 Start playback. (See page 9)

3 Rotate the MIC LEVEL control(s) to adjust the voice volume of the microphone.

4 Rotate the ECHO control to adjust the echo level if necessary.

Notes:
l   If you hear strange noises (squealing or howling) while using the Karaoke feature, move the microphone away from the speakers. Turning down the microphone volume or the speaker volume is also effective.

Changing the key of a song [Key Control]

Press KEY CONTROL during play.

l   To lower a half tone
   Press ♭
l   To return to the original key
   Press ♮
l   To raise a half tone
   Press #
l   The key changes up to 6 steps (both of "♭" and "♯")

Enjoying Karaoke

Changing the audio channels [Virtual Duet] [DVD Karaoke only]

DVD Karaoke discs are provided with two master vocals (male and female parts). This function is convenient to practice singing a duet song.

Press KARAOKE MODE during play.

Each time this button is pressed, the audio channel changes depending on the disc. (See ❺ on page 12)

For your reference:
l   For multi audio Video CDs/CDs, different sounds are recorded in the left and right channels as follows:
   1 ch (left): Monaural accompaniment
   2ch (right): Monaural accompaniment + master vocal

Enjoying Karaoke only with the Accompaniment [Guide Melody] [DVD Karaoke only]

For some DVD Karaoke discs, the guide melody for vocal is recorded as well as the accompaniment. To enjoy Karaoke only with the accompaniment, turn off the guide melody.

Press GUIDE MELODY during play.
The guide melody is turned off.

l   Pressing the button again turns on the guide melody.

Increasing the volume of the master vocal automatically [Voice Changer]

While you are singing, the master vocal volume is decreased and when you stop singing, the volume is increased automatically. This function is convenient when practicing a new tune.

Press VOICE during play.
The voice changer function is turned on.

l   Press the button again turns off the voice changer function.

Enjoying Karaoke using the ordinary discs [One Touch Karaoke]

Press ONE TOUCH during play.
The master vocal volume is reduced like a Karaoke software.

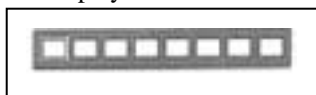l   Press the button again resumes the normal play.

Notes:
*Depending on the type of prerecorded songs, master vocal volume cannot be reduced.
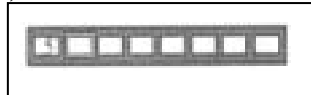l   A mono-recorded disc cannot be used.

11

Karaoke request play

1 Press REQUEST during play or in the STOP mode.
  The Karaoke request screen is displayed.

2 Press the numeric button(s) to enter the desired song(s).

- l Select the title number for DVDs or the track number for Video CDs/CDs. (Refer to the jacket of the disc concerned for the title/track numbers.)
- l Up to 8 titles/tracks can be programmed.
- l To select a 2-digit number, use the > 10 button. For example, press" >10", "2" and "5" to select "25".

3 If REQUEST is pressed in the stop mode Press PLAY.

  Play of the selection now begins.

To clear the Karaoke request screen

Press REQUEST.

To clear the program(s)

Tilt the joystick to the ◀ / ▶ direction to select the program to be cleared and press SELECT. Pressing CLEAR clears the last program.

Enjoying Karaoke using Karaoke GUI screen

1 Press KARAOKE DISP. During play.
  The Karaoke GUI screen is displayed.
- l Pressing the button again clears the Karaoke GUI screen.

**2 Tilt the joystick to the ◀ / ▶ direction to select the preferred item.**

3 Tilt the joystick to the ▲ / ▼ direction to select the preferred item.

(Continued on the right page)

Enjoying Karaoke using Karaoke GUI screen

No.	Remarks	Changing Method
❶	To jump to the desired title/track number	▲ ▼ or Numeric/ SELECT
❷	To change the key of a song (See page 11.) l ♭ (To lower a half tone), ♮ (To return to the original key)or ♯ (To raise a half tone)	▲ ▼
❸	To turn the guide melody on or off (See page 11.) l OFF or ON	▲ ▼
❹	To turn the voice changer function on or off (See page 11.) l OFF or ON	▲ ▼
❺	To change the Karaoke mode (See page 11.) l For DVD Karaoke (1 vocal): ON or "- - -" (OFF) l For DVD Karaoke (2 vocals): 1+2, V1, V2 or "- - -" (OFF) l For Video CD/CD: LR, L or R	▲ ▼
❻	To turn the one touch Karaoke function on or off (See page 11.) l ◀))) (OFF) or ◀))) (ON)	▲ ▼

- l " ▲ ▼ " means tilting the joystick to the ▲ /▼ direction and "Numeric" means pressing the numeric button.
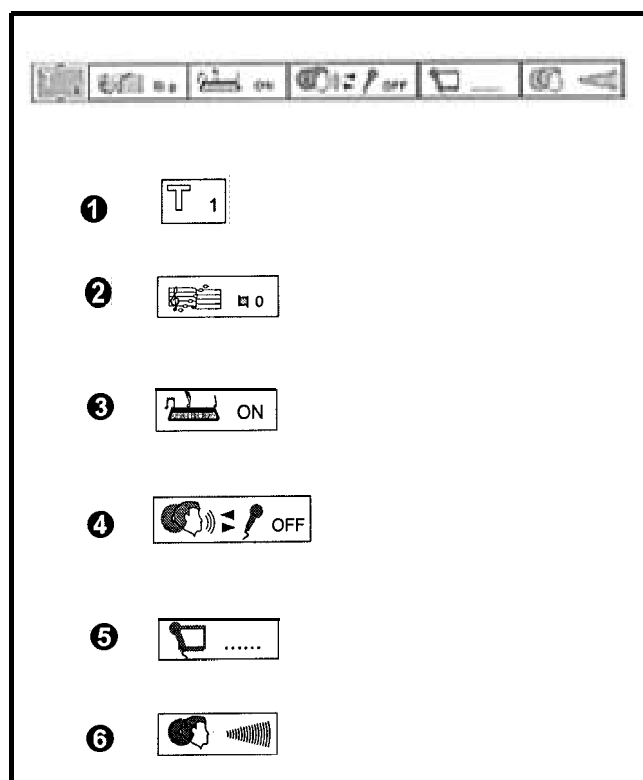
General information about GUI screen

This unit features GUI (Graphical User Interface) screens consisting of icons showing disc information (title/chapter/track number, elapsed playing time, audio/subtitle language, and angle) and player information (repeat play, play mode, marker, picture mode, Karaoke vocal ON/OFF, master volume, etc.)

Common procedures [A]

1 Press DISPLAY during play or in the stop mode.
Each time this button is pressed, the TV monitor changes as shown below.

┌─ GUI screen for selecting disc information
│   ↓
│   GUI screen for selecting player information
│   ↓
│   GUI screen for slow-motion play and rapid advance
│   (reverse)   ↓
└─ GUI screen is cleared

l   Some functions cannot be accessed from the stop mode.

2 Tilt the joystick to the ◀/▶ direction to select the preferred item.
l   The currently selected item is indicated by the yellow frame on the GUI screen.

3 Tilt the joystick to the ▲/▼ direction to select the preferred setting.
l   When numbers are displayed (e.g. title No.), the numeric buttons are also effective for setting instead of the joystick.
l   For some functions the setting will be registered immediately; for others, SELECT must be pressed.

Press DISPLAY, RETURN, or CLEAR to clear the GUI screen.

Example of GUI screens

(The screens may differ depending on the disc contents.)
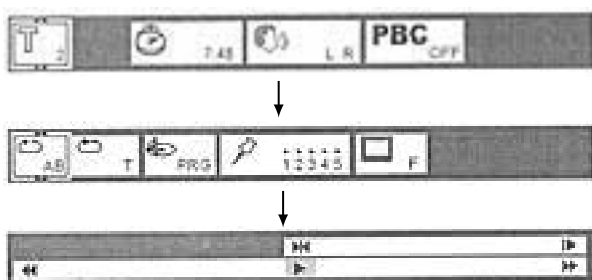l   **DVD [A]**
l   **Video CD [B]**
l   **CD [C]**

For your reference:
l   Depending on the type of DVD software and a TV with automatic picture zoom function enabled, the GUI screen may not be displayed or only partially displayed on the TV screen.
In this case, select the appropriate TV screen type by consulting the operation manual of the TV.
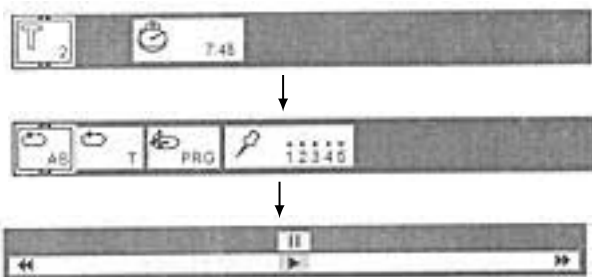
[A]

[B]

[C]

13
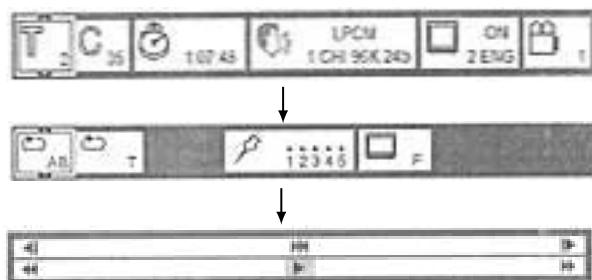
Detailed description of each GUI icon
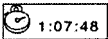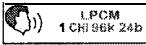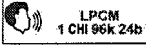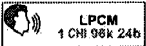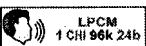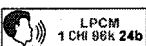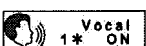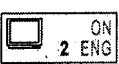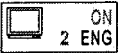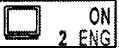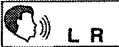
Screen fro disc infromation

No.	Remarks	Changing method
(1)	To show the current title No. [DVD] or track No. [Video CD/CD] to jump to the desired title No. Or track No.*1	▲ ▼ or Numeric/ SELECT
(2)	To show the current chapter No. or to jump to the desired chapter No. [DVD only]	▲ ▼ or Numeric/ SELECT
(3)	To show the elapsed time and to directly select scenes by the elapsed time*2 [DVD] or to show the elapsed time [Video CD/CD]	Numeric/ SELECT
(4)	To show the current audio soundtrack language No. And to change to the desired one [DVD only] (See page 19.) (DVD only)	▲ ▼ or Numeric
(5)	To show the audio soundtrack language selected using the above icon	——
(6)	To show the audio attribute (type) of the disc currently being played (DVD only) l LPCM (Linear PCM), ⬛⬛ [Dolby Digital (AC-3)]	——
(7)	To show the audio attribute (sampling frequency or channel No.) of the disc currently being played [DVD only] l For Linear PCM disc: 48 kHz or 96kHz l For Dolby Digital (AC-3) disc: 1ch to 5ch	——
(8)	To show the audio attribute (bit No.) of the disc currently being played [DVD only] l For Linear PCM disc : 16 bit to 24 bit	——
(9)	To show the number of recorded vocals (DVD Karaoke only) (See page 19.) l 1 vocal: ON or "- - -" (OFF) l 2vocal: V1 +V2, V1, V2 or "- - - " (OFF)	——
(10)	To show the current subtitles language No. and to change to the desired one (DVD only) (See page 18.)	▲ ▼ or Numeric
(11)	To show the subtitle language selected using the above icon (DVD only)	
(12)	To display/clear subtitles (DVD only) (See page 18.)	▲ ▼
(13)	To show the current angle No. and to change to the desired one [DVD only] See age 18.	▲ ▼ or Numeric
(14)	To select the audio mode [Video CD (See page 19.) l LR, L or R	▲ ▼
(15)	To show whether Video CD menu play is ON or OFF [Video CD with playback control only] (See pages 9 and 10)	

l "▲ ▼" means tilting to the joystick to the ▲/▼ direction and "Numeric" means pressing the numeric button.

*1 The track number cannot be selected during menu play of the Video CD.

*2 This function does not work with some DVDs

(1) TT₂

(2) ©₃₅

(3) 1:07:48

(4) LPCM 1 CH 96k 24b

(5) LPCM 1 CH 96k 24b

(6) LPCM 1 CH 96k 24b

(7) LPCM 1 CH 96k 24b

(8) LPCM 1 CH 96k 24b

(9) Vocal 1* ON

(10) ON 2 ENG

(11) ON 2 ENG

(12) ON 2 ENG

(13) 1

(14) L R

(15) PBC OFF

Detailed description of each GUI icon

For your reference:
- For the language abbreviations used for the audio sound-track and subtitle language icons, see the table [A].

Screen for player information [B]

No.	Remarks	Changing method
(1)	To start A-B repeat play (See page 17.)	SELECT
(2)	To select the repeat play mode (See page 17.) - C (chapter repeat), T (title repeat) or OFF (normal play) [DVD] - T (track repeat), A (disc repeat) or OFF (normal play) [Video CD/CD]	◀ ▶
(3)	To show the current play mode [Video CD/CD only] (See page 16.) - "---" (normal p!ay), PRG (program play) or RND (random play)	
(4)	To store a marker	SELECT
	To recall a marker	◀ / ▶→▲
	To clear a marker	◀ ▶→▲ CLEAR
	(See page 18)	
(5)	**To select the picture mode [DVD／Video CD only]** - **N (normal), S (soft), or F (fine)**	

- " ◀ ▶ ▲ ▼ " means tilting the joystick to the ◀/▶/▲/▼ direction
- *1 This function does not work with an interactive DVD or during menu play of Video CD.

Screen for slow motion play and rapid advanced (reverse) [C]

① **Still/pause**
   Tilt the joystick to the A direction to select " ▶◄ "
② **Slow-motion play**
   Tilt the joystick to the ◀/▶ direction.'
   ◀| : Backward (DVD only)
   |▶ : Forward (DVD/Video CD only)
③ **Play**
   Tilt the joystick to the ▼ direction to select " ▶ "
④ **Rapid reverse/advance**
   Tilt the joystick to the ◀ (Backward)/ ▶ (Forward) direction?

*1 Each time the joystick is tilted, the speed increases in up to 5 steps.

[A]

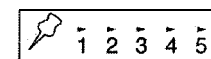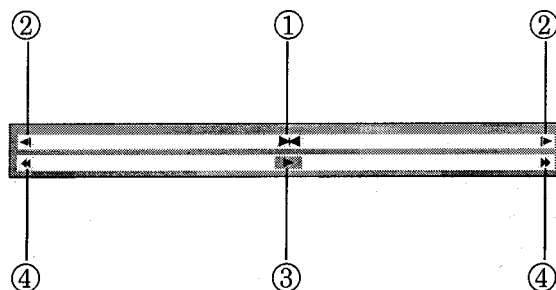| CHI	Chinese	FRA	French	DEU	German
ITA	Italian	EPS	Spanish	NLD	Dutch
SVE	Swedish	NOR	Norwegian	DAN	Danish
PRO	Portuguese	RUS	Russian	JPN	Japanese
ENG	Englidh	KOR	Korean	MAL	Malay
VIE	Vietnamese	THA	Thai	*	Other

[B]

❶ AB

❷ T

❸ PRG

❹ 1 2 3 4 5

❺ F

[C]

Program play [Video CD/CD]

The player plays the tracks in the disc in an order you specify.

Note:
l The program play function cannot be used when connected to a PAL TV.

1 Press PLAY MODE in the stop mode.
The program playback screen appears on the TV monitor.

```
Choose a track, then press SELECT

1    7    13    19
2    8    14    20        2
3    9    15    21        8
4    10   16              3
5    11   17              5
6    12   18              6
Clear last
Clear all

Press PLAY to start
```

Track numbers included in the disc

2 Tilt the joystick to the ◀ / ▶ / ▲ / ▼ direction and press SELECT, or press the numeric button(s), to select the preferred track number.
The selected track is stored in the memory.

```
Choose a track, then press SELECT

1    7    13    19
2    8    14    20        2
3    9    15    21        8
4    10   16              3
5    11   17              5
6    12   18              6
Clear last
Clear all

Press PLAY to start
```

l Repeat step 2 to select another track.
l Up to 18 tracks can be programmed.

```
Choose a track, then press SELECT

1    7    13    19
2    8    14    20        2
3    9    15    21        8
4    10   16              3
5    11   17              5
6    12   18              6
Clear last
Clear all

Press  PLAY  to  start
```

3 Press PLAY.

Play now begins in the programmed sequence.

After playback
Play is stopped and the program playback screen is displayed.

Returning to normal play
1 Press STOP. (Program play is suspended.)
2. Press PLAY MODE twice.
3. Press PLAY.
Normal play begins.
(The content of the program is still retained in the memory.)

Program play [Video CD/CD]

Clearing the program
When the program playback screen is displayed

```
Choose a track, then press SELECT

1    7    13    19
2    8    14    20        2
3    9    15    21        8
4    10   16              3
5    11   17              5
6    12   18              6
Clear last
Clear all

Press PLAY to start
```

l **To clear the last program one by one**
Move to "Clear last", and press SELECT.
Press CLEAR of the remote control unit also clears the last program]
l **To clear all the programs**
Move to "Clear all", and press SELECT.
(The programs are also cleared when the power is turned off or the disc is removed.)

Random play [Video CD/CD]

The player plays the tracks in the disc in random order.

1 Press PLAY MODE twice in the stop mode.
The random playback screen appears on the TV monitor.

```
Random Playback

Press PLAY to start
```

2 Press PLAY.

Play now begins in the random order.

After playback
Play is stopped and the random playback screen is displayed.

Returning to normal play
1 Press STOP. (Random play is suspended.)
2. Press PLAY MODE.
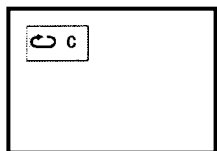3. Press PLAY.
Normal play begins.

Repeat play

Repeat viewing (listening)

Press REPEAT MODE during play.
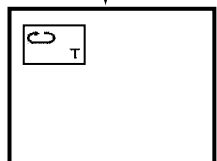Each time this button is pressed, the TV monitor
changes as shown below and the disc will repeat a
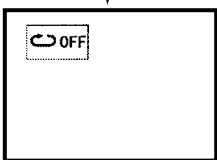chapter or title (DVD) or a track (Video CD/CD).

l **DVD**

Repeat of chapter being played
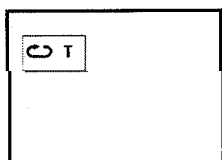
Repeat of title being played
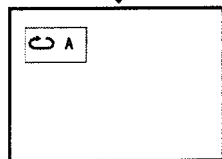
Cancel repeat mode
(Normal play)

l **Video CD/CD**

Repeat of track being played

Repeat of entire disc contents

Cancel repeat mode
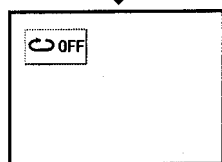
To return to normal play

Press REPEAT MODE several times until " ↻ OFF "
is displayed.

Notes:
l Repeat play works only with discs for which the
   elapsed playing time appears on the unit's display
   during playback.
   *Repeat play may not work correctly with some DVDs

To enjoy program repeat play
If REPEAT MODE is pressed during program play (see
page 16), the display changes as follows

Repeat of programmed track
being played
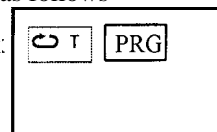
Repeat of all programs
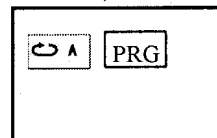
Cancel repeat mode
(Normal program play)
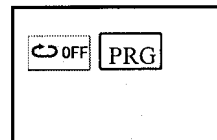
Repeating sections between two specific points (A-B repeat)

**1 Press A-B REPEAT during play at the point
where repeat play is to commence (A).**
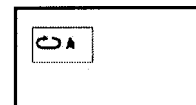
**2 Press A-B REPEAT at the point where repeat
play is to be concluded (B).**
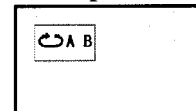
Repeat play of the selection between points A and B starts.

To return to normal play
Press A-B REPEAT several times until " ↻ l " l

Notes:
l A-B repeat play works only within a title **(DVD)** or a
   track (Video CD/CD).
l A-B repeat play works only the discs for which the
   elapsed playing time appears on the unit's display
   during playback.
l Some subtitles recorded around point A or B may fail
   to appear. (DVD)

Storing markers in memory to be viewed (listened) again

Storing a marker in the memory

1 Press MARKER during play.

" l " indicates no marker has been stored yet.
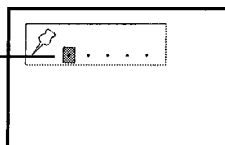
2 Press SELECT during play at the starting point to be viewed (listened) again.

Indicates "MARKER 1" is stored in the memory.
(If SELECT is pressed where any number is already displayed, the previous starting point will be replaced by the new one.)
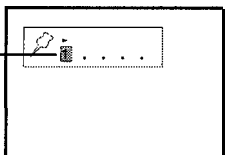
Up to 5 markers can be stored in the memory.
l Press MARKER to clear the display.

Recalling/clearing a marker

1 Press MARKER during play
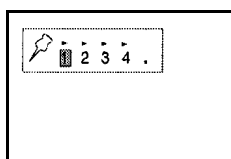
2 Tilt the joystick to the ◀ / ▶ direction to select the marker to be recalled/cleared.
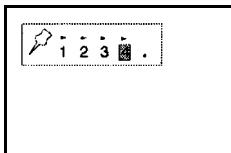
3 Tilt the joystick to the A direction to recall a marker.

or

Press CLEAR to clear a marker.

Play resumes from the point corresponding to the selected marker. (The display will be cleared automatically.)

or

The selected maker is cleared. (Press MARKER to clear the display.)

Notes:
l These operations work only with discs for which the elapsed playing time appears on the unit's display during playback.
l Some subtitles recorded around the marker may fail to appear. [DVD]

For your reference:
l   All the markers are cleared when the power is turned off or the disc is removed.

Changing subtitle language [DVD only]

The subtitle language of your player has been factory pre-set to English (This operation works only with discs on which multiple subtitle languages are redorded.)

1 Press SUBTITLE during play.
l   When no subtitles are recorded "--" will be displayed instead of the language number.

Number of the subtitle language being played back

2 Tilt the joystick to the ▲ / ▼ direction until the preferred language is selected.

Pressing the numeric button(s) also changes the subtitle language.

l Press SUBTITLE or SELECT to clear the display.

To clear/display the subtitles

Tilt the joystick to the ◀ / ▶ direction to select ON or OFF at the step 2.

Note:
l In some cases, the subtitle language is not changed immediately to the select one.

For your reference:
l When the preferred language is not selected even after tilting the joystick several times, it means that the language is not available on the disc.
l When the power is turned on or the disc is removed, subtitles appear in the language selected at the initial settings. If this language is not recorded on the disc, they appear in the disc's priority language.

18

Changing audio soundtrack language [DVD only]

The audio language of your player has been factory pre-set to English (This operation works only with discs on which multiple audio soundtrack languages are recorded.)

1 Press AUDIO during play.

l When no audio soundtrack is recorded, "--" will be displayed instead of the language number.

Number of the audio soundtrack language being played back

2 Tilt the joystick to the ▲/▼ direction until the preferred language is selected.

Pressing the numeric button(s) also changes the audio soundtrack language.

l Press AUDIO or SELECT to clear the display.
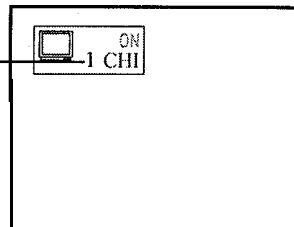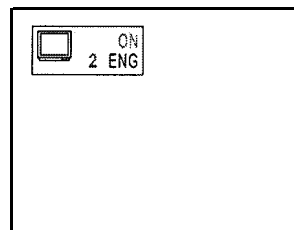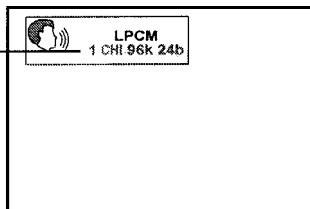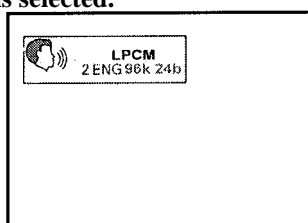
For your reference:
l When the preferred language is not selected even after tilting the joystick several times, it means that language is not available on the disc.
l When the power is turned on or the disc is removed, the language heard is the one selected at the one selected at the initial settings. If this language is not recorded on the disc, only the available language on the disc will be heard.

Switching vocals ON or OFF for Karaoke disc [DVD/Video CD]

1 Press AUDIO during play.
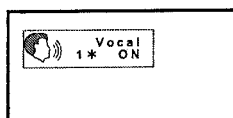
2 Tilt the joystick to the ◀/▶ direction until the preferred setting is selected.

l **DVD Karaoke (1 vocal)**
   ON ◀—▶ --- (OFF)
l **DVD Karaoke (2 vocals)**
   1+2 ➔ V1 ➔ V2 ➔ --- (OFF)
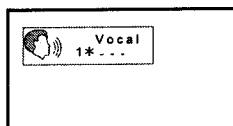
l **Video CD**
   LR ➔ L ➔ R
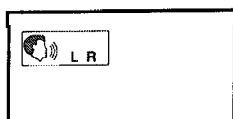
l Press AUDIO or SELECT to clear the display.

Note:
l This operation does not work with CDs.

Viewing from another angle [DVD only]

Some DVDs may contain scenes which have been shot simultaneously from a number of different angles. For these discs, the same scene can be viewed from each of these different angles using the ANGLE button. (The recorded angles differ depending on the disc used.)

1 Press ANGLE during play.

Number of angle being played back
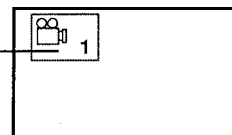
2 Tilt the joystick to the ▲/▼ direction until the preferred angle is selected.

Press the numeric button(s) also changes the angle.
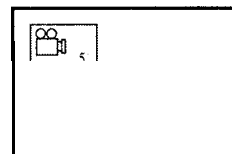
l Press ANGLE or SELECT to clear the display.

Notes:
l This function only works for discs having scenes recorded at different angles.
l The ANGLE indicator on the unit lights up at scenes recorded at different angles to indicate that angle switching is possible.
The angle number can be programmed beforehand; the angle will be switched to the selected number when the ANGLE indicator lights up.

Using a title menu [DVD only]

Some discs with movies, for example, may be available with two or more titles. If the disc has a title menu recorded on it, the TITLE button can be used to select the movie title. (The details of operation differ depending on the disc used.)

1 Press TITLE during play.

A list of the titles on the disc is now displayed

TITLE MENU	
Dogs	Castles
Lovers	Birds
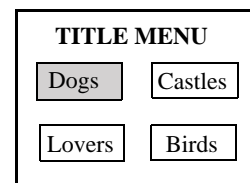
(Example)

l Press TITLE again resumes play from the scene when TITLE was first pressed.

2 Tilt the joystick to the ◀/▶/▲/▼ direction and press SELECT or PLAY, or press the numeric button(s), to select the preferred title.

TITLE MENU	
Dogs	Castles
Lovers	Birds

Birds

of the world
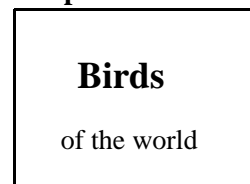
The selected title now starts playing.

Using a DVD menu [DVD only]

Some DVDs have unique menu structures called DVD menus. For example, DVDs programmed with complex contents provide guide menus, and those recorded with various languages provide menus for audio and subtitle language. Although the DVD menu's contents and operation differ from disc to disc, the following explains basic operation when this feature is used.

1 Press MENU during play.

The DVD menu available on the

disc is now displayed.

```
      DVD MENU
    ┌──────────────┐
    │  1 SUBTITLE  │
    └──────────────┘
    ┌──────────────┐
    │   2 AUDIO    │
    └──────────────┘
    ┌──────────────┐
    │   3 ANGLE    │
    └──────────────┘
```

(Example)

l Press MENU again resumes play from the scene when MENU was first pressed.

2 Tilt the joystick to the ◀ / ▶ / ▲ / ▼ direction and press SELECT, or press the numeric button(s) to select the preferred item.

The selected item is now executed.

```
      DVD MENU
    ┌──────────────┐
    │  1 SUBTITLE  │
    └──────────────┘
    ┌──────────────┐
    │   2 AUDIO    │
    └──────────────┘
    ┌──────────────┐
    │   3 ANGLE    │
    └──────────────┘
```

When the menu continues onto another screen Repeat step 2.

Initial settings

Once the initial settings have been completed, the player can always be operated under the same conditions (especially with DVD discs).
The Settings will be retained in the. memory even after turning the power off until the settings are changed.
Note:
The initial settings function cannot be used when connected to a PAL TV.

Common proccedures of initial settings

1 Press SETUP in the stop mode.

2 Tilt the joystick the ▲ ▼ direction to select the preferred item and press SELECT.
Each screen for setting the value is displayed.
  1 Disc language (see page 20)
  2 Ratings (see page 20)
  3 Menu language (see page 21)
  4 On-Sreen Messages (see page 21)
  5 FL Display (see page 21)
  6 TV Aspect (see page 22)
  7 Digital Audio Output (see page 22)
  8 Speaker Settings (see page 23)
  9 Other Settings (see page 23)

3 Tilt the joystick to the ▲ ▼ direction to select the preferred value arid press SELECT.
l Some items require additional steps. (See the respective page.)

Settings is finished and the initial settings screen is displayed

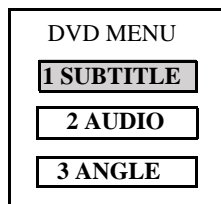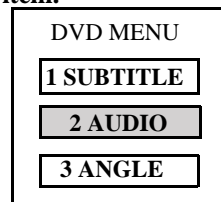**To cancel during setup operation**
Press RETURN or select "0". (The previous screen is displayed.
To clear the initial settings screen
Tilt the joystick to the ▲ ▼ direction to select "0" and press SELECT. (Pressing SETUP or RETURN also clears the initial settings screen.)
For your reference:
l The numeric buttons can also be used for selecting items or values instead of the joystick: in this case, pressing SELECT is not neccessary.

Selecting disc language [DVD only]

Selecting rating level [DVD only]

This is to disable the playing of specified DVDs which are unsuitable for children.
l Some DVDs are encoded with specific rating level. If the rating level of the disc is higher than that preset in the setup operation, playback of the disc will be prohibited.

1 At the initial settings screen
Select "2 Ratings" by the joystick and press SELECT.

All DVDs can be Played back. (Factory setting)

DVDs for general audiences/children can be play back (DVDs) for adults are prohibited.)

DVDs for children can be played back (DVDS for adults/general audiences adults are prohibited.)

Playback of all DVDs is prohibited (e.g. to prohibit playback of DVDs for which are not encode with rating level information)
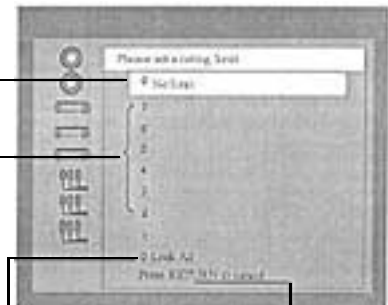
2 Select the preferred level by the joystick and press SELECT.

3 When level 7 or lower is selected
Input a 4-digit password and press SELECT.

The lock symbol appears closed to show the rating is locked.

Example: "4344" Do not forget your password.

4 Press SELECT.
Setting is finished and the initial settings screen is

l The rating is locked. Any discs whose rating is higher than the setting cannot be played back unless the correct password is entered.

To change the settings

1. Select "2" by the joystick at the initial settings screen and press SELECT.

2. Input a 4-digit password and press SELECT.

3. Select the preferred item (1-4) by the joystick and press SELECT.

4. **1 Unlock Player**
   Press SELECT.
   2 Change Password
   Enter a new 4-digit password and press SELECT.
   Press SELECT again.
   3 Change Level
   Select a level and press SELECT.
   4 Temporary Unlock
   (The rating is unlocked temporarily only for the current disc.)
   Press SELECT.
5. Select "0" and press SELECT to exit.

Setting is finished and the initial settings screen is displayed.

Note:
l Some discs may not be encoded with specific rating level information though its disc jacket says that is for "adults". For those discs, the age restriction will not work.

Setting language of On-Screen Display menu

Refer to "common procedures of initial settings" on page 20.

Switching the On-Screen Display ON or OFF

You can select whether On-Screen Display messages such as PLAY and STOP will be displayed or not.

1 At the initial settings screen
Select "4 On-Screen Messages" by the joystick and press SELECT.

2 Select the preferred item (1 or 2) by the joystick and press SELECT.

Setting is finished and the initial settings screen is displayed.

Selecting the display brightness

1 At the initial settings screen
Select "5 FL Display" by the joystick and Dress

2 Select the preferred item (l-3) by the joystick and press SELECT.

Setting is finished and the initial settings screen is displayed.

For your reference:
l Even if "3 Dim During DVD/CD Play (Auto)" is selected, the display resumes brightness when a button for special play such as SLOW/SEARCH and STILL/PAUSE is pressed.

Selecting TV screen Type

Select the appropriate screen type according to your TV set; conventional size screen (4:3) or wide-screen (16:9)

1 At the initial settings screen
  Select "6 TV Aspect" by the joystick and press SELECT.

2 Select the preferred item (1 or 2) by the joystick and press SELECT.
  4:3 Select when a conventional TV set is
        connected. (factory setting)
  The video material
  formatted in the
  Pan & Scan style is
  played back in the style
  (the left and right edges
  are cut off).

  The video material not
  formatted in the Pan &
  Scan style is played
  back in the letterbox
  style (black bands
  appear at top and
  bottom of screen).

  16 : 9 Select when a wide-screen TV set is
        connected.

  Play in "FULL"
  size. (Setting the
  wide-screen TV to
  "FULL" mode is also
  necessary.)

  *Each screen shows an example when the video
   material for a wide-screen is played.
   (This setting does not affect the video material for
   conventional size.)

Setting is finished and initial settings screen is displayed.

Also refer to "Common procedures of initial settings" page 20.

Selecting digital input

Select the digital output to be output from the optical/ coaxial digital audio output connector of the unit

1 At the initial settings screen
  Select "7 digital Audio Output" by the joystick and press SELECT.

2 Select the preferred item (l-3) by the joystick and press SELECT.
  When "1" LPCM(DVD) is selected
  Off: Only linear PCM of 48kHz/16 bit is output from
        the digital audio output connector. During play-
        back of the DVD recorded in the linear PCM of
        48kHz/20 bit/24 bit or 96 kHz no digital audio
        is output. (Factory setting)
  PCM: During playback of the DVD recorded in the
        linear PCM of 48kHz/20 bit/24 bit or 96kHz
        digital audio converted to 48kHz/16 bit is output
        (Digital output of PCM audio is restricted to
        48 kHz/16 bit or below for copyright protection.)
  When "2" Dolby Digital is selected
  Bitstream: Dolby Digital (AC-3) bitstream (2ch-5.1ch)
        is output. (Factory setting)
  PCM: PCM (2ch) of 48khz/16 bit is output.

3 Select the preferred value by the joystick at each screen and press SELECT.
The screen at the step 1 is displayed. Select "0" by the joystick and press SELECT to return to the initial settings screen.

For your reference:
l Make settings as shown in the following table
  depending on the kind of amplifier that is connected to
  the optical/coaxial digital audio output connector.

Type of amplifier to be connected	Recommendable setting	
	LPCM (DVD)	Dolby Digital
No amplifier is connected	Off	Bitstream
AV amplifier including Dolby Digital decoder	PCM*	Bitstream

*Audio output from the unit's audio output connectors is
 converted to 48 kHz/16 bit in addition to audio to audio
 from the audio output connector.
 To enjoy high quality sound at 48 kHz/20 bit/24 bit or 96
 kHz, connect the amplifier or decoder directly to the audio
 output connectors, not to the digital audio output connector.
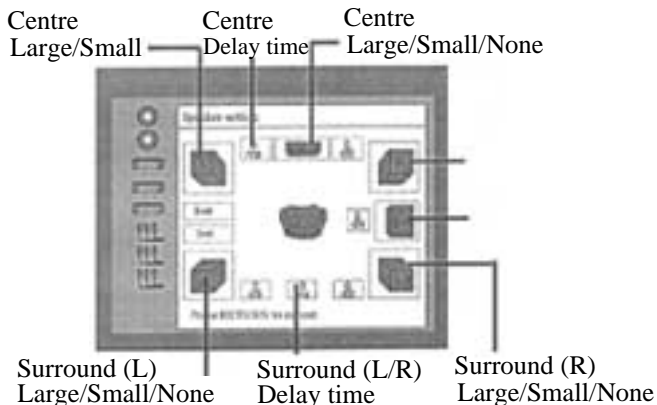 [Select "off" at the "1 PCM (DVD)"]

Also refer to "Common procedures of initial settings" page 20.

Speaker Settings

1 At the initial settings screen
Select "8 Speaker Setting" by the joystick and press SELECT.

Centre
Large/Small — Centre Delay time — Centre Large/Small/None

Surround (L)
Large/Small/None — Surround (L/R) Delay time — Surround (R) Large/Small/None

l Underlined item is a factory setting.

2 Select the preferred item by the joystick and press SELECT.

3 Select the preferred value by the joystick and press SELECT.
Speaker icons

l If the speaker is connected , display the icon. Clear the icon if the speaker is not connected.

l If the speaker supports low-frequency (under 100 Hz) reproduction, select the large icon. If the speaker's low-frequency (under 100 Hz) reproduction ability is poor, select the smaller icon. [When the subwoofer is not connected, be sure to select "Large" for the front speakers (L/R).]

Delay time

If the surround speaker or the center speaker can't be installed at an equal distance to (or further away) the front speakers from the listening position, change the delay time to get better surround effect.

l When D2 or D3 is equal to or larger than D1, no setting is necessary ([A]). Otherwise, change the setting according to the table below.

Speaker	Delay time	Difference between D1 and D2/D3
Center speaker (D2)	1.3 ms	approx. 50 cm
	2.6 ms	approx. 100cm
	3.9 ms	approx. 150 cm
	5.3 ms	approx. 200 cm
Surround speakers (D3)	5.3 ms	approx. 200 cm
	10.6 ms	approx. 400cm
	15.9 ms	approx. 600cm

Channel balance:

While listening to the test signal, adjust the volume of the center, surround (L), surround (R), speakers and the subwoofer so that the volume is equal to that of the front speakers.

4 Select "Exit" by the joystick and press SELECT.

Setting is finished and the initial settings screen is displayed.

Note:

l The "Large/Small" setting has no effect on DVDs recorded in MPEG 2 audio.

For your reference:
l **TO output the test signal**
  1. Select "Test" by the joystick, and then press SELECT. (Test signals will be output consecutively from each speaker clockwise.)
  2. Select the appropriate volume (-6db through +6db) by the joystick while the test signal is being output from the speaker.
  3 Press SELECT. (The test signals are stopped.)

Other Settings

1 At the initial settings screen
Select "9 Other settings" by the joystick and press SELECT.
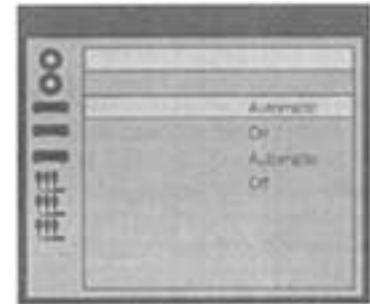
2 Select the preferred item (1-4) by the joystick and press SELECT
When "1" still mode is selected
Automatic: "Frame still" and "Field still" are automatically selected during the still mode
When "2" audio during search is selected
On: Factory setting (When noises during search are disagreeable, select "Off".)
Off: Select this setting if audio during search is not necessary.
When "3" TV mode (4:3) is selected
Pan&Scan: the video material for a wide screen will be played back in a Pan&Scan style on a conventional size TV.
Letterbox: select this setting to play back the video Material for a wide screen in the letter box style on a conventional size TV.
When "4"D.(Dynamic) range compression is selected
OFF: normal audio range is selected
ON: select this setting to enjoy listening to dynamic sound even on a low volume. This is useful for latenight listening. this function only works with Dolby Digital (AC-3 DVD's)]

3 select the preferred value by the joystick at each screen and press select
The screen at the step 1 is disabled. Select "0" by the joystick and press SELECT to return to the initial setting screen.

Also refer to "common procedures of initial settings on page 20

[A]
Center speaker
Front speaker (L)   Front speaker (R)

Subwoofer

Surround speaker (L)   Surround speaker (L)
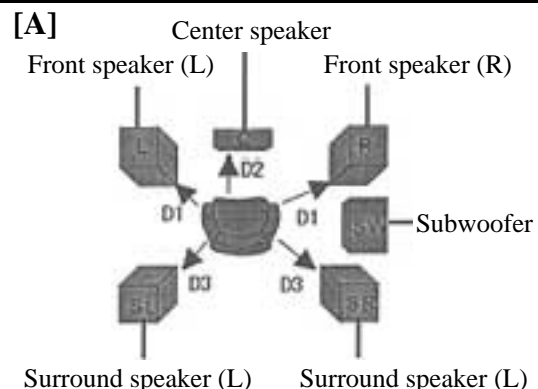
Definition of terms

Angle
Recorded onto some DVD discs are scenes which have been simultaneously shot from a number of different angles (the same scene is shot from the front, from the left side, from the right side, etc.). With such discs, the ANGLE button can be used to view the scene from different angles.

Chapter number
These numbers are recorded on DVD discs. A title is subdivided into many sections, each of which is numbered, and specific parts of video presentations can be searched quickly using these numbers.

DVD
This refers to a high-density optical disc on which high quality pictures and sound have been recorded by means of digital signals. Incorporating a new video compression technology (MPEG 2) and high-density recording technology, DVD enables esthetically pleasing full-motion video to be recorded over long periods of time (for instance, a whole movie can be recorded). DVD has a structure consisting of two 0.6 mm thin discs which are adhered to each other. Since the thinner the disc, the higher the density at which the information can be recorded, a DVD disc has a great capacity than a single 1.2 mm thick disc. Since the two thin discs are adhered to each other, there is the potential to achieve double-side play sometime in the future for even longer duration play.

Playback control (PBC)
This is recorded on a Video CD (version 2.0). The scenes or information to be viewed (or listened to) can be selected interactively with the TV monitor by looking at the menu shown on the TV monitor

Subtitles
These are the printed lines appearing at the bottom of the screen which translate or transcribe the dialogue. They are recorded on DVD disc.

Time number
This indicates the play time which has elapsed from the start of a disc or a title. It can be used to find a specific scene quickly. (It may not work with some discs.)

Title number
These numbers are recorded on DVD discs. When a disc contains two or more movies, these movies are numbered as title 1 title 2, etc.

Track number
These number are assigned to the tracks which are recorded on Video CDs and CDs. They enable specific tracks to be located quickly.

Video CD
This contains recordings of pictures and sound whose quality is on a par with that of video tape. This player also supports Video CDs with playback control (version 2.0).

Specification

| Power Requirements: | AC 110 -240 V, 50/60 Hz |
| Power Consumption: | 22W (approx. 3.5 W when power is OFF by the power button or the remote control) |

Signal system:	**NTSC/PAL**
Weight:	**3.8 kg**
Dimensions:	**430 (W) x 325 (D) x 87.5 (H) mm** (excluding protrusions)

Operating temperature : +5~+35 ⁰C

Operating humidity range: 5~90% (no condensation)

Discs played:

(1) DVD-VIDEO disc
12 cm, single-sided, single-layer
12 cm, single-sided, double-layer
12 cm, double-sided, double-layer (one layer per side)
8 cm, single-sided, single-layer
8 cm, single-sided, double-layer
8 cm, double-sided, double-layer

(2) Compact disc (CD-DA, VIDEO CD)
12 cm disc
8 cm disc

S-video output:
Y output level: 1 v p-p (75 Ω)
C output level: 0.300 V p-p (75 Ω) (PAL)
0.286 V p-p (75 Ω)(NTSC)
Output connector : S terminal (1 system)

Video output:
Output level: 1 V p-p (75 Ω)

Audio output:
Output level: 2Vrms (1kHZ, 0 db)
5.1 ch discrete output

Audio signal output characteristics:
(1) Frequency response:
  l DVD (linear audio):
    2 Hz-22 Hz (48 kHz sampling)
    2 Hz-44 Hz (96 kHz sampling)
  l CD audio:
    2 Hz-20 Khz (EIAJ)
(2) S/N ratio:
  l CD audio: 110 db (EIAJ)
(3) Dynamic range:
  l DVD (linear audio): 100 db
  l CD audio: 99 db (EIAJ)
(4) Total harmonic distortion
  l CD audio: 0.0025% (EIAJ)

Digital audio output:
Optical digital output: Optical connector
Coaxial digital output: Pin jack
MIC jack: 6.3mm jack (2 systems)
Pickup: Wave length: 655 nm
Laser power: **CLASS 2**

Specifications are subject to change without notice.
Weight and dimensions are approximate.

Troubleshooting

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing.
Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

Symptom (Common)	Remedy
No Power	Insert the power plug into the scoket
Power turns its self off.	The power is automatically turned off after apporx. 30 minutes have elapsed in the stop mode (auto power off). Turn the power back on.
l Play fails to even when PLAY is Pressed l Play commences but stops immediately	l Condensation has formed: wait about 1 to 2 hours to allow the player to dry out. l This player cannot play discs other than DVDs, Video CDs and CDs. l The disc may be dirty and may require cleaning. l Ensure that the disc is installed with the label side up.
No Picture	l Ensure that the equiment is connected poperly l Ensure that input setting for the TV is "Video".
l No Sound. l Distorted sound.	l Ensure that the equiment is connected poperly l Ensure that input setting for the TV and stereo system are proper.
Picture is distorted during rapid advance or rapid reverse	The picture will be somewhat distorted at times: thisis normal
No 4:3 (16:9) picture	Choose the correct setup "TV Aspect" item which matches the TV set used.
No on-screen display.	The "Off" setting is selected for "On-Sceern Messages": select "ON"
No surround sound	l Choose the correct setup at the "Speaker setting" which matches your stereo system. l No surround sound is output during playback of DVD Karaoke. l No surround sound is output when a microphone is connected or the Karaoke function are activated for the DVDs which are not designed for Karaoke. Disconnect the microphone, return to the orginal one (◄┘)and/or set the Voice Change/One Touch Karaoke to OFF.
No operation can be performed with the remote control.	l Check the batteries are installed with the correct polarities (+ and -). l The batteries are depleted; replace them with new ones. l Point the remote control unit at the remote control sensor and operate. l Operate the remote control unit at a distance of not more than 7 meters from the remote control sensor. l Remove any obstacles between the remote control unit and the remote control sensor
No key operation (by the unit and/or the remote control) is effetive	Turn the unit off and then back on. Alternatively, turn offthe unit, disconect the AC power cord and the re-connect it. (The player may not be operating properly due to lightning, static electricty or some other external factor.
TV set cannot be operated by the remote control.	Not all TV models and brands can be operated with the universal remote control supplied
GUI Screen not displayed or only partially displayed on the TV screen	Select th apporpriate TV screen type by consulting the operation manual of the TV.

Symptom [DVD]	Remedy
No subtitles.	l Subtitles appear only with discs which contain them. l Subtitles are cleared from the TV monitor. Perform the steps on page 18 to display the subtitles.
Alternative audio soundtrack (or subtitle) languages fail to be selected.	l An alternative language is not selected with discs which do not contain more than one language. l In the case of some discs, the alternative language cannot be selected by operating the AUDIO or SUBTITLE button. Try selecting it from the DVD menu if one is available.

Symptom [DVD]	Remedy
Angle cannot be changed.	This function is dependent on software availability. Even if a disc has a number of angles recorded, these angles may be recorded for specific scenes only (when the ANGLE indicator on the unit lights up.)
The password for age restriction has been forgotten.	Please contact the local dealer.

Symptom [Video CD]	Remedy
No menu play.	This function works only for Video CDs with playback control.

Self-diagnosis display function

When an error or trouble is detected during operation, a service number appears in the display window.
When a service number has appeared, check out the details given below.

Service number	Player status	Remedy
U11	Disc is dirty.	Wipe the disc clean.
H □ □	Trouble is likely to have occurred. The number following "H" differs depend- ing on the status of the player.	Turn the unit off and then back to on. Alternatively, turn off the unit, disconnect the AC power cord, and then re- connect it.

Disc handling and maintenance

● Hold the disc by the edges so the surface will not be soiled with fingerprints. (Fingerprints, dirt and scratches can cause skipping and distortion.)
● Do not write on the label side with a ball-point pen or other writing utensils.
● Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
● Be careful not to drop or bend the disc.
● Do not install more than 1 disc on the disc tray.
● Do not try to close the disc tray when the disc is not installed properly.
● Be sure to store the disc in its exclusive case when not in use.

If the surface is soiled
Wipe gently with a soft, damp (water only) cloth. When wiping discs, always move the cloth from the center hole toward the outer edge.
(If you wipe the discs using a circular motion, circular scratches are likely to occur, which will cause noise.)

If the disc is brought from a cold to a warm environment, moisture may form on the disc
Wipe this moisture off with a soft, dry lint-free cloth before using the disc.

Improper disc storage
You can damage discs if you store them in the following places:
● Areas exposed to direct sunlight
● Humid or dusty areas
● Areas directly exposed to a heat outlet or heating appliance

Discs which cannot be played with this player
● DVD-ROM
● DVD-R/DVDRAM
● CD-ROM
● CDV
● CD-G

Maintenance
● Be sure to turn the unit off and disconnect the AC power cord before maintaining the unit.
● Wipe this unit with a dry soft cloth.
● If the surfaces are extremely dirty, wipe clean with a cloth which has been dipped in a weak soap-and-water solution and wrung out thoroughly, and then wipe again with a dry cloth.
● Never use alcohol, benzine, thinner, cleaning fluid or other chemicals. And do not use compressed air to remove dust.

PALSONIC WARRANTY CARD
DVD PLAYER
MODEL: DVD-2000

This Palsonic DVD Player ("the product") is warranted by PALSONIC CORPORATION PTY. LTD. ("the company") to be free from defects in material and workmanship under normal use and reasonable care (in the opinion of the company) within Australia for a period of 12 months from the date of original purchase covering both parts and labour

This product can only be repaired under this warranty by the company or by an Authorised service agent as appointed by the company. In home service is not available on this product under the terms of this warranty. Products requiring service pursuant to this warranty should be returned to PALSONIC CORPORATION PTY. LTD. (the company"), an authorised service agent or to an authorised retailer enclosing a copy of the purchase docket together with written instructions indicating the defect or faulty operation of the product. All freight and insurance charges are the responsibility of the owner and must be prepaid by the owner. Wherever possible the product should be returned in its original carton and packing or alternatively in a suitable carton and packing so as to prevent damage to the product. The company shall not accept any responsibility caused by inadequate or unsuitable packing.

Thiswarrantydoesnotcoveranyproductwhichhasbeensubjectedtomisuse,abuse,neglect,accidental damage,heat,moisture,dust,impropervoltageoranyalterationwhichaffectsthereliabilityorperformance oftheunit,notattributabletofaultymanufacture,partsorlabour

This warranty does not cover free parts and labour for any product which is faulty of defective in condition (in the opinion of the company) as a result from the owner not using the product as per instructions contained in the owner manual, misadjustment of controls, reception problems arising from inadequate antenna systems/or associated television receivers, outside interference main supply problems, tampering by unauthorised persons or incompatibility with other equipment.

This warranty does not cover charges resulting from service rendered outside normal business hours and/ or mileage charged by Authorised service agents. The company accepts no additional liability pursuant to this warranty for transportation expenses of the product or parts to and from the service agent or dealer.

This warranty does not cover the cleaning of Audio/Video heads as this is considered routine maintenance.

In the event that the supply of goods or services pursuant to this agreement is a supply of goods or services to a consumer as defined in the Trade Practices Act 1974(as amended) ("the Act"), nothing contained in this agreement excludes, restricts or modifies any condition, warranty, right or remedy which, pursuant to the Act, applies to this agreement or is conferred upon the customer, provided that to the extent that the Act permits PALSONIC CORPORATION PTY. LTD. to limit its liability for a breach of a condition or a warranty implied by the Act, then PALSONC CORPORATION PTY. LTD. liability for such breach shall be limited to

a) in the case of goods supplied pursuant to this agreement, the payment of the cost of replacing the goods or of acquiring equivalent goods;
and
b) in the case of services supplied pursuant to this agreement, the payment of the cost of services supplied again.

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